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for example an SRAM interface 1110, is provided. Optionally, interface 1110 directly controls flash memory module 1108 or uses a controller portion of USB controller 1104, optionally bypassing the USB protocol handling portion of controller 1104.

Optionally, a second USB connection is provided, for example for external control. A second USB controller 1106 may be provider. Alternatively or additionally, a switch 1102 is provided to switch commands and/or signals to the suitable controller. Power is optionally switched for example, as 10 described above.

In an exemplary embodiment of the invention, the SRAM interface is used for booting and once booting is completed, data transfer is accomplished using a USB (or other) interface which can often be considerably faster than a bootable SRAM 15 interface.

In an exemplary embodiment of the invention, circuit 1100 is packaged as a single integrated circuit suitable for embedding in devices, for example, a cellular telephone as described above.

Exemplary Variations

The above has described a telephone with an embedded flash storage system. Optionally, the flash storage system is removable, for example being a flash card of some type which is sealed in a receptacle on the telephone. Optionally, the telephone does not need to be powered down to remove the card.

In an alternative embodiment of the invention, the telephone includes a USB port (or other protocol) to which a USB-connecting flash memory system is attached. Optionally, the combined telephone and memory system acts as described above. Alternatively or additionally, the act of attaching the flash memory system to the telephone emulates the act of turning on or passing control over to the telephone. Optionally, a dual port USB flash memory storage device is used, so it can be connected in parallel to the telephone and a host.

It will be appreciated that the above described methods and apparatus of integrated telephone storage systems may be varied in many ways, including, changing the order of steps 40 and the types of components used. For example, a wide range of non-volatile solid state memories can be used, for example of RAM type and of FLASH type (e.g., NAND or NOR). The term "flash memory", except where otherwise noted, is used in the specification as a generic term for such memory modules. In addition, a multiplicity of various features, both of method and of devices have been described. In some embodiments mainly methods are described, however, also apparatus adapted for performing the methods are considered to be within the scope of the invention. It should be appreciated that 50 different features may be combined in different ways. In particular, not all the features shown above in a particular embodiment are necessary in every similar embodiment of the invention. Further, combinations of the above features are also considered to be within the scope of some embodiments 55 of the invention. Also, within the scope is software and computer readable-media including such software which is used for carrying out and/or guiding the steps described herein,

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such as partitioning and providing e-mail functionality. Also, it should be noted that the various circuits described maybe, in some embodiments, provided as single integrated circuits and in others as a set of circuits and/or other discrete components. When used in the following claims, the terms "comprises", "includes", "have" and their conjugates mean "including but not limited to".

It will be appreciated by a person skilled in the art that the present invention is not limited by what has thus far been described. Rather, the scope of the present invention is limited only by the following claims.

The invention claimed is:

1. A method of sending e-mail from a computer, comprising:

attaching a telephone to a computer;

saving at least one e-mail message from said computer on said telephone;

detaching said telephone; and

automatically sending said e-mail message after said detaching.

- 2. A method according to claim 1, wherein said saving is transparent to a user of said computer, as compared to a regular e-mail transmission process.
- 3. A method according to claim 1, wherein said automatically sending is carried out at a delay after said detaching.
- 4. A method according to claim 1, wherein said telephone emulates an e-mail server to said computer.
- 5. A method according to claim 1, wherein an RF circuit of said telephone is powered off during said saving.
- **6**. A method of sending e-mail from a computer, comprising:

attaching a telephone to a computer, the telephone including a hard-disk emulator on which a mailbox file accessed by an e-mail application of the computer, is stored:

saving at least one e-mail message from the computer on the telephone;

activating the telephone; and

automatically sending the e-mail message after said acti-

- 7. A method according to claim 6, wherein said saving is transparent to a user of the computer, as compared to a regular e-mail transmission process.
- **8**. A method according to claim **6**, wherein said activating comprises detaching the telephone.
- 9. A method according to claim 8, wherein said automatically sending is carried out at a delay after said detaching.
- 10. A method according to claim 6, wherein said activating comprises turning on an RF subsystem of the telephone.
- 11. A method according to claim 6, wherein said activating comprises entering a coverage area of a base station for the telephone.
- 12. A method according to claim 6, wherein the telephone emulates an e-mail server to the computer.
- 13. A method according to claim 6, wherein an RF circuit of the telephone is powered off during said saving.

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